IDROMAT®

Wear Ring

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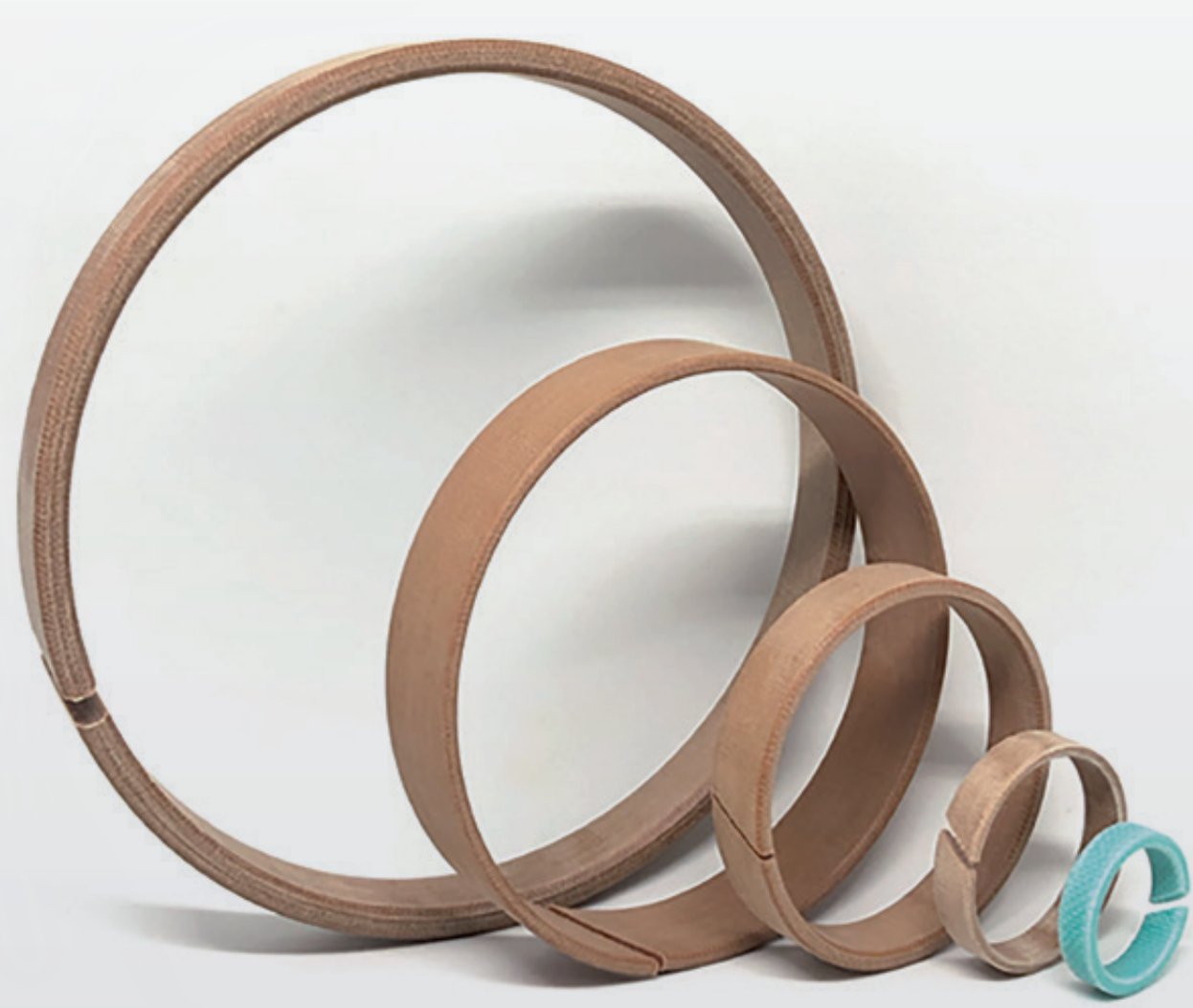
Azienda certificata ISO 9001:2015



WEAR RINGS

Definition

Non-metallic and non-conductible fabric reinforced resin bearing with solid lubricant which make the wear ring sufficient
self-lubricating resistance.

Features

Wide range of material selection for any industrial application
Available cut on size or on strip by roll for any large diameter
Available also for bushing application
Low coefficent of friction which permit to operate with various combination of speed and load
Self lubrication with excellent wear resistance compare to PTFE and POM wear ring solution
Wear resistance to water , sea water , and chemical fluid
Easily accomodate with many di erent hydraulic fluid
Excellent in abrasion resistance
Good dimentional stability very adaptable to misalignment avoiding any vibration
High resistance to side loading , due to the phisical composition and structure of the internal fibers.
Outstanding insulation features out of non – conducible characters
Minimize noise factor and demage with mated shaft
Easy to instal
Operating for rotating and alternative motion
Flexible to any size and design solution
Tight production tollerance
Available for standard cut 40° - 60° , on request Straight – Step cut
Cheap vs metallic bearing solution .
No maintenance required

Applications

Earth Moving Equipment: front loader end arm bushes, pivot point brushes, idier whell bushes using excavators.
Hydraulic Industry: wear ring for hydraulic cylinder and pistons and rods.
Construction Equipment: link roller bushes,bushes for spring shackles, pivot bushes, thrust washer.
Vessels: stern shaft, trasmission shaft, rudder pintle bearings.
Water Sewage & treatment: stern shaft, trasmission shaft, rudder pintle bearings.
Heavy Industry
Automobile: conveyor bushes and bearings
Agriculture: tractor king pin bushes and other harvestor bushes.
Chemical Industry

CN10N

Profile

Material Composition

Weave cotton fabric + Phenol resin

Features

- Self-lubrication
- Good mechanical propreties
- Good dimensional stability
- Chemical resistance
- Excellence in water resistance
- Excellence in abrasion resistance
- High resistence to side loading
- Easy to install

Applications

Wear ring for all kinds of cylinder, sliding bearing, bushes, thrust plates
Iron and steel industry, agricultural equipment
Material handing equipment
Costruction machinery

CG10N

Profile

Material Composition

Fine weave cotton fabric + Phenol resin + Graphite

Features

- Self-lubrication
- Good mechanical propreties
- Good dimensional stability
- Chemical resistance
- Excellence in water resistance
- Excellence in abrasion resistance
- High resistence to side loading
- Easy to install

Applications

Wear ring for all kinds of cylinder, sliding bearing, bushes, thrust plates
Iron and steel industry, agricultural equipment
Material handing equipment
Costruction machinery

CM10N

Profile

Material Composition

Fine weave cotton fabric + Phenol resin + Mos2

Features

- Self-lubrication
- Good mechanical propreties
- Good dimensional stability
- Chemical resistance
- Excellence in water resistance
- Excellence in abrasion resistance
- High resistence to side loading
- Easy to install

Applications

Wear ring for all kinds of cylinder, sliding bearing, bushes, thrust plates
Iron and steel industry, agricultural equipment
Material handing equipment
Costruction machinery

CN15N

Profile

Material Composition

Polyester Fiber + Polyester resin + PTFE

Features

- Self-lubrication
- High load bearing capacity
- Swell in water (below 0,1 %)
- Excellence in impact
- Low coefficient of friction
- Good chemical resistance
- Long service life
- Less wear than metallic, bearing materials
- Easy to install

Applications

Wear ring, petroleum and chemical plant agricolture
Screw Bushes for vessel
Marine crane plan bush
Hydraulic cylinder & components

CG15N

Profile

Material Composition

Polyester Fiber + Polyester resin + Graphite

Features

- Self-lubrication
- High load bearing capacity
- Swell in water (below 0,1 %)
- Excellence in impact
- Low coefficient of friction
- Good chemical resistance
- Long service life
- Less wear than metallic, bearing materials
- Easy to install

Applications

Wear ring, petroleum and chemical plant agricolture
Screw Bushes for vessel
Marine crane plan bush
Hydraulic cylinder & components

CM15N

Profile

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Polyester Fiber + Polyester resin + PTFE + Mos2

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Applications

Wear ring, petroleum and chemical plant agricolture
Screw Bushes for vessel
Marine crane plan bush
Hydraulic cylinder & components

TECHNICAL DATA

		Unit	CN10N	CG10N	CM10N
Profiles					
Specific Gravity			1.37	1.4	1.4
Max.operating temperature		C°	125	145	145
Min.operating temperature		C°	-40	-40	-40
Max.Road (static)		(N/mm^2)	234	261	247
Max.Road (dynamic)		(N/mm^2)	55	58	58
Maximum PV factor		(N/mm^2 m/s)	0.15	0.2	0.2
Coefficient of friction			0.13	-0.08	-0.8
Shaft surface finish			<=0.4	<=0.4	<=0.4
Rockwell Hardness		HRM	100	90	100
Flexural strenght	Lenghtwise	N/mm^2	123	130	131
	Crosswise		117	103	117
Tensile strenght	Lenghtwise	N/mm^2	82	69	75
	Crosswise		67	48	62
Impact strenght	Lenghtwise	ft. 1b/in	1.92	1.7	1.7
	Crosswise		1.75	1.4	1.4
Compressive strenght		N/mm^2	234	261	247
Moisture absorption		%	<1.2	<1.2	<0.95

	Unit	CN15N	CG15N	CM15N
Profiles				
Specific Gravity		1.27	1.25	1.30
Max.operating temperature	C°	130	130	130
Min.operating temperature	C°	-40	-40	-40
Max.Road (static)	(N/mm^2)	345	345	346
Max.Road (dynamic)	(N/mm^2)	69	69	68
Maximum PV factor	(N/mm^2 m/s)	0.25	0.22	0.22
Coefficient of friction		0.05	-0.05	0.05
Shaft surface finish		<=0.4	<=0.4	<=0.4
Rockwell Hardness	HRM	100	100	100
Flexural strenght (Lenghtwise)	N/mm^2	69	69	68
Tensile strenght (Lenghtwise)	N/mm^2	55	65	70
Impact strenght (Lenghtwise)	ft. 1b/in	9.9	9.9	9.9
Compressive strenght	N/mm^2	345	345	345
Moisture absorption	%	<0.1	<0.1	<0.1

Wear ring STRIP

CN15N

Profile

Strip

Role of 10 metres

Material Composition

Polyester Fiber + Polyester resin + PTFE

Features

- Self-lubrication
- High load bearing capacity
- Swell in water (below 0,1 %)
- Excellence in impact
- Low coefficient of friction
- Good chemical resistance
- Long service life
- Less wear than metallic, bearing materials

Applications

Wear ring, petroleum and chemical plant agricolture
Screw Bushes for vessel
Marine crane plan bush
Hydraulic cylinder & components
Min diameter 60 mm; Max diameter no limit

CG10N

Profile

Strip

Role of 10 metres

Material Composition

Fine weave cotton fabric + Phenol resin + Graphite

Features

- Self-lubrication
- Good mechanical propreties
- Good dimensional stability
- Chemical resistance
- Easy production
- Excellence in water resistance
- Excellence in abrasion resistance
- Excellence in impact

Applications

Wear ring for all kinds of cylinder, sliding bearing, bushes, thrust plates
Iron and steel industry, agricultural equipment
Material handing equipment
Costruction machinery
Hydraulic cylinder & components
Min diameter 60 mm; Max diameter no limit

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Note/Notes

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stampato 10/2021